

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Revise the paragraph on page 3 beginning at line 1 as follows:

For example, the value received at area 100 is only indicative of the green portion impinging on area 100. However, some part of that incoming light is also red. Another part of the incoming light is also blue. Hence, each of the pixels is processed according to a transformation to solve the equation:

$$R = K_{11}R + K_{12}G + K_{13}B$$

$$G = K_{21}R + K_{22}G + K_{23}B$$

$$B = K_{31}R + K_{32}G + K_{33}B$$

On page 4, revise the paragraph beginning at line 17 as follows:

FIG. 1 shows a prior art megapixel system used in a color filter array;

On page 8, revise the paragraph beginning at line 20 as follows:

For each of the colors to be corrected, three ~~least-squared~~ least-squares fits are carried out. The ~~least-squared~~ least-squares fits are done for each of the primary colors; here, red, green, and blue. An error signal G_E is obtained by taking the square of the difference between G_n' (what one expects to see for the green color) subtracted from the G actual (what one actually sees). Similar operations are done for red and blue.

Revise the equation on page 9 at line 16 as follows:

$$\min_{C_{k1}, C_{k2}, \dots, C_{kN}} \sum_{j=1}^M \left[\left(\sum_{i=1}^N C_{ki} \cdot X_i^j \right) - Y_i^j \right] \rightarrow C_{k1}, C_{k2}, \dots, C_{kN}; k=1, \dots, N$$

$$\min_{C_{k1}, C_{k2}, \dots, C_{kN}} \sum_{j=1}^M \left[\left(\sum_{i=1}^N C_{ki} \cdot X_i^j \right) - Y_i^j \right]^2 \rightarrow C_{k1}, C_{k2}, \dots, C_{kN}; k=1, \dots, N$$

Revise the equation on page 11 at line 1 as follows:

$$\min_{C_{k1}, C_{k2}, \dots, C_{kN}} \sum_{j=1}^M \left[\left(\sum_{i=1}^N C_{ki} \cdot X_i^j \right) - Y_i^j \right]^2 \rightarrow C_{k1}, C_{k2}, \dots, C_{kN}; k=1, \dots, N$$

$$\min_{C_{k1}, C_{k2}, \dots, C_{kN}} \sum_{j=1}^M \left[\left(\sum_{i=1}^N C_{ki} \cdot X_i^j \right) - Y_i^j \right]^2 W_j \rightarrow C_{k1}, C_{k2}, \dots, C_{kN}; k=1, \dots, N$$
